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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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08/08/2001

Omar Messlem

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10/05/2004

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EXAMINER

AU, SCOTT D

ART UNIT

PAPER NUMBER

2635

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/890,951

Applicant(s)

MESSLEM ET AL.

Examiner

Scott Au

Art Unit

2635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-13 and 15 is/are rejected.
- 7) ☒ Claim(s) 3 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This communication is in response to applicant's response to Request for reconsideration, which is filed June 29, 2004.

A Request for reconsideration to the claims 1-15 have been entered and made of record in the Application of Messlem et al. for a "Method for detecting portable objects and system for carrying out said method" filed August 8, 2001.

Claims 1-15 are pending.

Response to Arguments

Applicant's amendments and argument to the rejected claims are insufficient to distinguish the claimed invention from the cited prior arts to overcome the rejection of said claims under 35 U.S.C 112, 35 U.S.C 102(a) and 35 U.S.C 103(a) as discussed below. Applicant's argument with respect to the pending claims 1-15, filed on June 29, 2004, have been fully considered but they are not persuasive for at least the following reasons.

On pages 1 and 2, Applicant's argument with respect to the 35 U.S.C 112, is persuasive. Therefore, the Examiner has withdrawn the rejections.

On page 4, paragraph 2, Applicant's argument with respect to the invention of Lastinger et al. that Lastinger et al. does not teach that "all of the antennae are simultaneously sent the same signal" according to claim 1, is not persuasive.

Applicant's arguments are narrower than what is actually claimed. Nowhere do the claims limit the inventions that all of the antennae are simultaneously sent the same signal.

Lastinger et al. disclose an antenna subsystem couples one or more antenna structures to one or more interrogators. For example, antenna subsystem 220 includes antenna controllers 222 and 226, and antenna bus 224. Interrogator 210, via antenna bus controller 216 and antenna bus 224, provides commands to antenna controllers 222 and 226 for the connection of suitable antennas to transceiver 217, particularly transmitter 214 and receiver 215. The same or different antennas may be used for transmitting and receiving concurrently or in sequence (e.g., with suitable squelching). Antenna controllers may be coupled to each other and to other antenna controllers by antenna bus 224 for deriving resulting signals by processing signals from different antennas (col. 8 lines 8-27). Lastinger et al. cite (U.S. patent application No. 09/372,274) and now is (U.S. patent No. 6,362,737) that in the object identification system the monitor 124 may simultaneously transmit on two frequencies to the antennae (150 and 152) (col. 42 lines 13-17; see Figures 1 and 24) for communication with the transceivers. Therefore, the argument is not persuasive.

On page 4, paragraph 3, Applicant's argument with respect to the invention of Lastinger et al. that Lastinger et al. does not teach that "sending of a signal to all of the antennas simultaneously" according to claim 9, is not persuasive.

Lastinger et al. disclose an antenna subsystem couples one or more antenna structures to one or more interrogators. For example, antenna subsystem 220 includes antenna controllers 222 and 226, and antenna bus 224. Interrogator 210, via antenna bus controller 216 and antenna bus 224, provides commands to antenna controllers 222 and 226 for the connection of suitable antennas to transceiver 217, particularly transmitter 214 and receiver 215. The same or different antennas may be used for transmitting and receiving concurrently or in sequence (e.g., with suitable squelching). Antenna controllers may be coupled to each other and to other antenna controllers by antenna bus 224 for deriving resulting signals by processing signals from different antennas (col. 8 lines 8-27). Lastinger et al. cite (U.S. patent application No. 09/372,274) and now is (U.S patent No. 6,362,737) that in the object identification system the monitor 124 may simultaneously transmit on two frequencies to the antennae (150 and 152) (col. 42 lines 13-17; see Figures 1 and 24) for communication with the transceivers. Therefore, the argument is not persuasive.

On page 5, paragraph 1, Applicant's argument with respect to the invention of Duke does not teach that "reception of response signals from antennae at respective input ports that are assigned to each antenna" according to claim 3, is persuasive. Therefore, the Examiner has withdrawn the rejections.

Claim Rejections - 35 USC § 102

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1, 4-5, 9,11-13 and 15 are rejected under 35 U.S.C. 102(e) as being unpatentable over by Lastinger et al. (US# 6,621,410).

Referring to claim 1, Lastinger et al. disclose a method of detecting portable objects (115,122,134) (i.e. responders) using a network of N antennae (232,234) (i.e. grid antennae), controlled by a centralized management unit (212) (i.e. processor), comprising the following steps (i.e. see Figure 2A):

transmitting signals simultaneously to all antennae (232,234) (i.e. grid antennae) from said management unit (212) (i.e. processor) (col. 8 lines 60-61),

receiving a resulting signal by said management unit (212) (i.e. processor), said resulting signal comprising response signals from the antennae (232,234) (i.e. grid antennae) which have detected a portable object(115,122,134) (i.e. responders) (col. 7 lines 44-53), and successively selecting each object detected from this resultant signal, according to a pre-established sequence (col. 1 lines 27-40 and col. 7 lines 44-53).

Referring to claim 4, Lastinger et al. disclose a detection method of claim 1, wherein the reception of the resulting signal by the management unit (212) (i.e. processor) is obtained by the reception of said resulting signal at an input port (224) (i.e.

antenna bus) of the unit assigned to all the antennae in the system (col. 8 lines 8-27; see Figure 2A)

Referring to claim 5, Lastinger et al. disclose a detection method of claim 1, wherein the reception of the resulting signal includes a step of identifying the origin of the response signals forming said result signal (col. 2 lines 53-65).

Referring to claim 15, Lastinger et al. disclose a detection method of claim 4, wherein the reception of the resulting signal includes a step of identifying the origin of the response signals forming said result signal (col. 4 lines 63-65).

Referring to claim 9, Lastinger et al. disclose a system of detecting portable objects (115,122,134) (i.e. responders) including a network of N antennae (232,234) (i.e. grid antennae) associated with transmission/reception means (217) (i.e. transceiver) and a centralized management unit (212) (i.e. processor) (i.e. see Figure 2A), comprising:

transmission means (217) (i.e. transceiver) in the management unit that is connected to the transmission/reception means (222,226) (i.e. controllers of antenna structures (102,104) of the antennae (232,234) (i.e. grid antennae) and that sends signals simultaneously to all the antennae (col. 8 lines 8-27; see Figure 2A),

reception means (217) (i.e. transceiver) in said unit being that is connected to said transmission/reception means (222,226) (i.e. controllers of antenna structures

(102,104 and that receives response signals from antennae (232,234) (i.e. grid antennae) which have detected a portable object (115,122,134) (i.e. responders), in the form of distinct signals for each antenna (col. 6 lines 43-67),

means for successively selecting each portable object detected according to a pre-established sequence (col. 1 lines 27-40 and col. 7 lines 44-53).

Referring to claim 11, Lastinger et al. disclose a detection system of claim 9, wherein the transmission and reception means of the management unit and transmission/reception means of the antenna are connected in point-to-point mode by connections of the serial transmission type (i.e. see Figure 2A, bus 224 is the connection point-to-point between the antennae transceiver and the transceiver 217 of the interrogator 210) (col. 8 lines 19-27).

Referring to claim 12, Lastinger et al. disclose a detection system of claim 9, wherein the transmission and reception means of the management unit include an input port connected to all the antennae by a connection of the serial transmission type (i.e. see Figure 2a, a transceiver (217) is connected to the antennae with one bus (224) connection).

Referring to claim 13, Lastinger et al. disclose a detection system of claim 11, wherein the management unit includes an antenna discriminator (216) (i.e. antenna bus controller) (col. 8 lines 4-12).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lastinger et al. (US# 6,621,410) as applied to claims 1 and 9 above, and further in view of Federman (US# 6,456,191).

Referring to claim 2, Lastinger et al. disclose a detection method of claim. However, Lastinger et al. did not explicitly disclose wherein the successive selection of each object is effected by the use of anti-collision algorithm.

In the same field of endeavor of tag system, Federman discloses wherein the successive selection of each object is effected by the use of anti-collision algorithm (col. 4 line 61 to col. 5 line 7) in order to have a large number of tags move in and out of a field simultaneously, increasing the challenge to reliably and efficiently locate and identify the tags.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to include the successive selection of each object is effected by the use of anti-collision algorithm disclosed by Federman into responder

system of Lastinger et al. with the motivation for doing so would prevent collision among the tags being detected.

Referring to claim 10, Lastinger et al. in view of Federman disclose a detection system and method in claims 1 and 9, claim 10 equivalent to that of claim 2 addressed above, incorporated herein. Therefore, claim 10 is rejected for same reasons given with respected to claim 2.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lastinger et al. (US# 6,621,410) in view of Duke (EP# 05,443,500) as applied to claim 14 above, and further in view of Ono et al. (US# 5,686,906).

Referring to claim 6, Lastinger et al. in view of Duke disclose a detection method of claim 14. However, Lastinger et al. view of Duke did not explicitly disclose wherein the identification of a response signal includes a step of storing the identification of the antenna associated with the input port at which the response signal is received.

In the same field of endeavor of monitoring communication apparatus, Ono et al. disclose the identification of a response signal includes a step of storing the identification of the antenna associated with the input port at which the response signal is received (col. 9 lines 43-48; see Figure 7) in order to detect and ensure the antenna within the communication area.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to include a step of storing the identification of the antenna associated with the input port at which the response signal is received disclosed by Ono et al. into transponder system of Lastinger et al. in view of Duke with the motivation for doing so would allow record of antenna associated with the transponders.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lastinger et al. (US# 6,621,410) in view of Duke (EP# 05,443,500) and Ono et al. (US# 5,686,906) as applied to claim 6 above, and further in view of Lemelson et al. (US# 5,019,815).

Referring to claim 7, Lastinger et al. in view of Duke and Ono et al. disclose a detection method of claim 14. However, Lastinger et al. view of Duke and Ono et al. did not explicitly disclose wherein said storing step includes positioning a flip-flop in a logic state and deactivating it when the unit has entered into communication with the portable object detected by the corresponding antenna (10B) (i.e. sensing means) (col. 3 lines 1-18 and col. 4 line 48 to col. 5 line 33; see Figure 4) of the car (11).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to include storing step includes positioning a flip-flop in a logic state and deactivating it when the unit has entered into communication with the portable object detected by the corresponding antenna disclosed by Lemelson et al.

into transponder control unit of Lastinger et al. view of Duke and Ono et al. with the motivation for doing so would allow the identification of an antenna transmitting the signal.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lastinger et al. (US# 6,621,410) as applied to claim 1 above, and further in view of Duke (EP# 05,443,500).

Referring to claim 8, Lastinger et al. disclose a detection method of claim 15. However, Lastinger et al. did not explicitly disclose wherein the identification of a response signal includes a step of concatenating the identification of antenna in the response signal sent by the antenna.

In the same field of endeavor of portable transmitter system, Duke discloses wherein the identification of a response signal includes a step of concatenating the identification of antenna in the response signal sent by the antenna (i.e. see abstract, col. 7 lines 37-46, col. 13 claim 1 and col. 14 claim 5; see Figures 2a-3b) in order to determine which antenna received the strongest signal from each portable transmitters.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to include the identification of a response signal includes a step of concatenating the identification of antenna in the response signal sent by the antenna disclosed by Duke into transponder system of Lastinger et al. with the motivation for doing so would allow the identification of which antenna received the strongest signal from the transponder.

Claim Objections

Claims 3 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Referring to claim 3, the following is a statement of reasons for the indication of allowable subject matter: the prior art fail to suggest limitations that wherein the reception of the resulting signal by the management unit is obtained by the reception of the response signals from the antennae respectively at an input of the unit assigned to each antenna and adding said signal.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

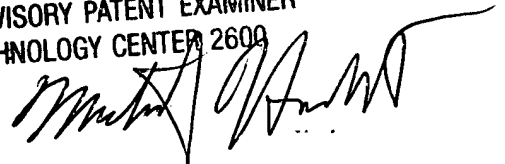
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Au whose telephone number is (571) 272-3063.

The examiner can normally be reached on Mon-Fri, 8:30AM – 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached at (571) 272-3068. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-872-9306.

Scott Au

MICHAEL HORABIK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

A handwritten signature in black ink, appearing to read 'Michael Horabik', is written over the printed name and title.